

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~striketrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please CANCEL claims 2 and 11, AMEND claim 1 and ADD claim 12 in accordance with the following:

1. (CURRENTLY AMENDED) A data encoding/decoding apparatus comprising:
 - a decoder decoding a coded stream, which is formed in a first format and inputted ~~on~~in real time, to generate video data and audio data;
 - a video output memory storing the video data from the decoder;
 - an audio output memory storing the audio data from the decoder;
 - a video input memory storing video data which is externally supplied to the data encoding/decoding apparatus, or is received internally from the decoder;
 - an audio input memory storing audio data which is externally supplied to the data encoding/decoding apparatus, or is received internally from the decoder;
 - a first data path provided to connect the decoder directly to the video input memory, when the coded stream of the first format is transcoded to generate a second stream formed in a second format;
 - a second data path provided to connect the decoder directly to the audio input memory, when the transcoding is performed; and
 - an encoder encoding the video data from the video input memory and the audio data from the audio input memory to generate the second stream of the second format,

wherein, when the transcoding is performed, the first data path and the second data path are set from an OFF state to an ON state so that the video data output from the decoder is stored in the video input memory using the first data path and delivered to the encoder after passing through the video input memory only, and the audio data output from the decoder is stored in the audio input memory using the second data path and delivered directly to the encoder after passing through the audio input memory only.

2. (CANCELLED).

3. (ORIGINAL) The data encoding/decoding apparatus of claim 1 further comprising:

a video output interface outputting the video data stored in the video output memory to an external device in a predetermined format at predetermined times; and

an audio output interface outputting the audio data stored in the audio output memory to an exterior device in a predetermined format at predetermined times.

4. (ORIGINAL) The data encoding/decoding apparatus of claim 1 further comprising:

a video input interface storing in the video input memory video data which is inputted from an external device at predetermined times; and

an audio input interface storing in the audio input memory audio data which is inputted from an external device at predetermined times.

5. (ORIGINAL) The data encoding/decoding apparatus of claim 1 further comprising a clock generating unit generating a clock signal for circuit components of the data encoding/decoding apparatus wherein the clock signal from the clock generating unit is supplies to each circuit component without adjusting a phase of the clock signal based on clock reference information of the coded stream inputted on real time.

6. (WITHDRAWN) A decoding apparatus for use with an external encoder connected to the decoding apparatus, comprising:

a decoder decoding a coded stream, which is formed in a first format and inputted on real time, to generate video data and audio data;

a video output memory storing the video data from the decoder;

an audio output memory storing the audio data from the decoder;

a first data path provided to deliver the video data from the decoder to the external encoder, the first data path connecting the decoder and the external encoder when the coded stream of the first format is transcoded to generate a second stream formed in a second format; and

a second data path provided to deliver the audio data from the decoder to the external

encoder when the transcoding is performed.

7. (WITHDRAWN) The decoding apparatus of claim 6 wherein, when the transcoding is performed, the first data path and the second data path are set from OFF state to ON state, so that the video data output from the decoder is delivered to the external encoder through the first data path and the audio data output from the decoder is delivered to the external encoder through the second data path.

8. (WITHDRAWN) The data encoding/decoding apparatus of claim 1 wherein the coded stream of the first format is at least one of a MPEG2 transport stream and a digital video stream.

9. (WITHDRAWN) The data encoding/decoding apparatus of claim 1 wherein the second stream of the second format is at least one of a MPEG2 program stream and a MPEG4 program stream.

10. (WITHDRAWN) The decoding apparatus of claim 6 further comprising a clock generating unit generating a clock signal for circuit components of the decoding apparatus wherein the clock signal from the clock generating unit is supplies to each circuit component without adjusting a phase of the clock signal based on clock reference information of the coded stream inputted on real time.

11. (CANCELLED).

12. (NEW) An apparatus that receives a first coded stream of a first format input and o a second coded stream of a second format or video and audio data decoded from the first coded stream in real time, having a decoder that decodes the first coded stream to generate the video data and the audio data, a video output memory that stores the video data received from the decoder and outputs the data via a video output interface, an audio output memory that stores the audio data received from the decoder and outputs the data via an audio output interface, a video input memory that stores video data to be encoded, an audio input memory that stores audio data to be encoded, and an encoder that encodes video and audio data

received from the video input memory and the audio input memory, respectively, to output a second coded stream of a second format, comprising:

a first data path connecting the decoder directly to the video input memory, to store the video data decoded by the decoder from the first coded stream of the first format directly in the video input memory; and

a second data path provided to connect the decoder directly to the audio input memory, to store the audio data decoded by the decoder from the first coded stream of the first format directly in the audio input memory;

wherein the first data path and the second data path are enabled when the apparatus is used to output the video and audio data received in the first coded stream of the first format as the second coded stream of the second format, the video and audio data being transferred directly from the decoder to the video input memory and the audio input memory, respectively.